AMENDMENTS TO THE SPECIFICATION:

Page 1:

Please substitute the following paragraph for the paragraph beginning at line 21:

According to Japanese Patent Application Laid-Open No. Hei 7(1995)-36759, an IC card is disclosed, which includes a card controller for controlling the inside of a card and a ~~microcomputer~~ microcomputer for controlling a card controller and file data, uses mask ROM and a flash memory for file data storing memory as a local memory and shares its mask ROM as an attribute storing memory. Further, it is aimed to improve the speed of writing a memory, grow longer the span of life, reduce the price, and improve the reliability by using PSRAM as a control table as a part of data management information (information for uniforming rewriting number of times by recording rewriting number of times), a write buffer for improving writing speed and a garbage buffer at the time of erasing unnecessary data.

Page 2:

Please substitute the following paragraph for the paragraph beginning at line 21:

2

In accordance with Japanese Patent Application Laid-Open No. Hei 6(1994)-52674, flash EEPROM of the first mass storage unit is mounted on a printing circuit board, and flash EEPROM of the second mass storage unit is also mounted on the same printing circuit board. In this case, flash EEPROM of the second mass storage unit is mounted detachably by way of an IC socket. Thus, since it is possible to exchange ~~flush~~flash EEPROM, in which management information is stored, by each chip unit, it is possible to maintain the mass storage subsystem.

Page 3:

Please substitute the following paragraph for the paragraph beginning at line 7:

When the present ~~inventor~~inventors examined the function of the conventional memory unit, the memory area has been managed as one memory area as the whole memory device. Since the memory area is not identified separately, it is found that each of areas cannot be controlled separately by dividing the memory device into several areas logically. To put it concretely, in the case in which there exist data that should not be rewritten or erased erroneously by a public user in the memory unit, it is

convenient for protection if the data thereof can be protected just by being put in the prescribed areas as writing is prohibited. Since the conventional memory unit can not be separately controlled by each area in one memory unit, it is not possible to protect data existing in the areas by only the specified memory area being set as writing is prohibited. Further, in the case in which it is required to get log data of user's usage conditions, even if it is required to protect log data that are stored in the specified memory areas such that the data thereof should not read by the user, etc., it is very difficult to do so. Further, in the case in which the electrical power of the aforementioned memory unit is shut off at the time that data are written in the memory unit, it may take place that the data of the areas, in which data have been written, are erased. However, it is not possible to recover the data thereof by the memory unit.

Page 4:

Please substitute the following paragraph for the paragraph beginning at line 11:

~~The~~An object of the present invention is to provide technology for restricting accessing to the specified memory areas.

Page 5:

Please substitute the following paragraph for the paragraph beginning at line 1:

The summary of the representatives ~~of the invention~~ of the present invention are explained in the following.

Page 8:

Please substitute the following paragraph for the paragraph beginning at line 6:

At this time, a memory means for storing all management information ~~with all included~~ can be included. Further, in the aforementioned plural memory areas, an area for storing aforementioned management information by each memory area is provided and management information can be stored therein.

Page 14:

Please substitute the following paragraph for the paragraph beginning at line 18:

The information processor 11 is connected to a host

device 220, and it comes to be possible to access various

types of information in relation to the memory unit 10

between this host device 220 and the information processor

11. Further, the information processor 11 can operate and

control the memory device 12 by way of the address and data

bus AD_BUS and the control bus C_BUS. For this operation

control, ID information which is stored in the ID

information storing memory 13 is referenced, and then it

comes to be possible to operate individually for every

group based on this ID information. Here, the

aforementioned ID information is treated as an example of

management information of the present invention.

Page 16:

Please substitute the following paragraph for the

paragraph beginning at line 15:

The memory 14 as shown in FIG. 3B is divided, though

it is not limited, into respective data blocks and

management blocks corresponding thereto in the row

direction. The data block can store data. A management

block manages the aforementioned data by each 1 block unit

or 1 sector unit in order to save a redundancy of the data

6

block. If there is a ~~defected~~defective part in the data

block, 1 block or 1 sector which contains the

~~defected~~defective part thereof is redundancy-saved by

changing to a normal block or a normal sector in accordance

with redundancy save information which is managed by the

management block. The ID information storing memory 13 is

structured by a flash memory and change of information of

save information can be realized, and thus it comes to be

possible to save the redundancy of the data block for the

~~defected~~defective part which is caused after the proper

time.

Page 17:.

Please substitute the following paragraph for the

paragraph beginning at line 4:

Further, the memory 14 is divided into a user area ①,

an alternative area ②, and a managing area ③. The user

area ① is defined as an area ~~where~~which a user can use. The

alternative area ② is defined as an area capable of

changing a part, which cannot be used by the user area ①,

by each block unit or sector unit. The managing area ③ is

7

defined as an area for managing, by each block unit and

sector unit, information to identify whether or not

changing has been made through the changing area and

information of a changing point at the time of being

changed. At the time of accessing the memory 14,

information which is managed in the managing area ③ is

checked, and the ~~alternated~~alternative area is accessed

instead of the normal area, if the normal area is

alternated.

Page 17:

Please substitute the following paragraph for the

paragraph beginning at line 17:

As shown in FIG. 3A, a table is formed in the ID

information storing memory 13 by storing ID information of

the aforementioned memories 14 to 17 in an address order.

Though it is not limited, it is divided into a data block

and a management block. The data block can store the data.

The management block manages the aforementioned data by

each 1 block unit or 1 sector unit in order to save the

redundancy of the aforementioned data block. If there is a

~~defected~~defective part in the data block, 1 block or 1

sector containing the ~~defected~~defective part thereof is

redundancy-saved by alternating a normal block or a normal

sector in accordance with redundancy save information which

is managed by the management block. Since the ID

information storing memory 13 is structured by a flash

memory and information of save information can be

~~cahnged~~changed, it comes to be possible to save the

redundancy of the data block to the ~~defected~~defective part

that is caused later.

Page 18:

Please substitute the following paragraph for the

paragraph beginning at line 17:

Further, the ID information storing memory 13 is

divided into the user area ①, the alternative area ②, and

the managing area ③ in the column direction. The user area

① is defined as an area which can be used by a user. The

alternative area ② is defined as an area which can

alternate the part which could not be used in the user area

① by each block unit or sector unit. The managing area ③

is defined as an area for managing, by each block unit and

sector unit, information to identify whether or not

changing has been made through the changing area and information of a changing point at the time of being changed. When the memory 14 is accessed, information which has been managed in the managing area ③ is checked, and the alternative area therefor is accessed instead of the normal area when the alternative area has been alternated. In this example, as described in an earlier part of the specification, the data block and the management block corresponding thereto are provided. The aforementioned data block is managed by each 1 block unit or 1 sector unit in order to save the redundancy of the data block. On the other hand, the table of ID information, which enables to control each predetermined memory area separately in beforehand, is formed in the data block.

Page 19:

Please substitute the following paragraph for the paragraph beginning at line 23:

The memory device 12 is accessed by the host device 20. In the ID information storing memory 13 and the other memories 14 to 15 for storing files, there are included the data blocks and the management blocks therefor. In the case in which the data block is saved by each sector unit, in

accordance with information of the management block, the

~~defected~~defective part of the data block is alternated by

each sector unit. Further, in this example, in the case in

which the memories 14 to 17 are accessed, in accordance

with ID information which has been tabled in the table part

of the ID information storing memory 13, the memory areas

which have been set in advance are separately controlled.

<u>Page 45</u>:

Please substitute the following paragraph for the

paragraph beginning at line 6:

FIG. 16 is a table structure of ID information in the

case in which the structure of FIG. 15 is employed. In this

example, the group 0 is set in the normal read/write area,

the group 1 is set in the read only area, and the group 2

is set in the spare area. Further, the memories 14, 15, 16

and 17 include respective ~~alternating~~alternative areas and

management information and those ~~alternating~~alternative

areas and management information are allocated. Those

~~alternating~~alternative areas and management information,

however, are areas for managing the memories with reference

to the origin, so it is not appropriate to have attributes

in accordance with ID information. Thus all "00" are

assigned to ID information thereof and ID information thereof should not be managed independently. Needless to say, it comes to possible to control independently by rewriting this ID information. Accordingly, it is possible to manage by rewriting only ID information for altering the ~~alternating~~alternative areas and managing areas.

Page 48:

Please substitute the following paragraph for the paragraph beginning at line 11:

~~In this way,~~While the invention ~~that is invented by the inventor~~ has been explained concretely, it goes without saying that the present invention is not limited thereto but can be possibly changed variously without changing the gist thereof.

Page 50:

Please substitute the following paragraph for the paragraph beginning at line 15:

Though the case, in which the invention ~~invented by the present inventor~~ is mainly applied to the memory unit formed in the card shape for an application field as a background, is explained, the present invention is not

limited thereto but <u>can be</u> applied to various memory units

widely.

Page 50:

Please substitute the following paragraph for the

paragraph beginning at line 22:

The effects obtained by the ~~representative~~

~~one~~<u>representatives</u> of the inventions that are disclosed in

the present application are described in the following.

Page 51:

Please substitute the following paragraph for the

paragraph beginning at line 5:

Further, if the first control information is included

in the aforementioned management information, it is

possible to prohibit writing data in the prescribed memory

area of the aforementioned plural memory areas based

thereon and protect data that exist in the aforementioned

memory area thereby. If the second control information is

included in the aforementioned management information, it

is possible to prohibit reading out data from the

prescribed memory area of the aforementioned plural memory

areas based thereon, <u>and</u> thus it is possible to protect

13

data that exist in the aforementioned memory area thereby. If the third control information is included in the aforementioned management information 9, it is possible to store data that are written in the prescribed memory area of the aforementioned plural memory areas based thereon in the plural memory areas nearly at the same time, and thus it is possible to avoid losing data by utilizing data from other memory areas. If the fourth control information is included in the aforementioned management information, it is possible to store data that are written in the prescribed memory area of the aforementioned plural memory areas based thereon in the plural memory areas after the prescribed time has passed, and thus it is possible to avoid losing data by utilizing data from other memory areas in the case in which an uncorrectable error is caused. The aforementioned management information can include the fifth control information for identifying whether or not the prescribed memory areas as the spare areas can be used. In this case, the spare area based thereon can be used, and thus the memory capacity is prevented from being reduced by alternating for the spare area.